Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Previously presented) A battery comprises:

a battery can housing a cell that supplies electrical energy at terminals of the cell by an electro-chemical reaction with oxygen, the can including:

a first member having at least one hole that is exposed to air; and

a second member; and

a mechanism, to move a first one of the first and second members, the mechanism comprising:

a member whose shape deforms in response to a current passing through the member when current is drawn from the battery, the member being coupled to the first one of the first and second members to move the first one of the first and second members such that when current is drawn from the battery, the member has a first shape that allows air to pass through the opening in the first member into the battery and the member has a second shape that causes the one of the first and second members to move and inhibit air from passing through the opening and into the battery.

2. (Previously presented) The battery of claim 1 wherein the first and second members are coaxially disposed cylinders each having at least one opening that are placed in and out of registration to allow or inhibit air from passing into the battery.

3. (Previously presented) The battery of claim 1 wherein the first and second members are coaxially disposed cylinders each having a plurality of openings.

4. (Previously presented) The battery of claim 1 wherein the first and second members are coaxially disposed cylinders each having a plurality of openings arranged in a column along the length of the cylinders.

5. (Previously presented) The battery of claim 1 wherein the first and second members are cylindrical members and the member is coupled to the second cylindrical member that is coaxially disposed within the first cylindrical member.

6. (Previously presented) The battery of claim 1 wherein the member is an actuator comprised of a shape memory alloy material.

7. (Previously presented) The battery of claim 1 wherein the member is an actuator comprised of a high force, low displacement shape memory alloy (SMA).

8. (Previously presented) The battery of claim 7 wherein the actuator is coupled to a circuit, and the circuit only draws power during a change of state allowing the circuit to minimize drain on the battery.

9. (Previously presented) The battery of claim 6 wherein the actuator is a wire with the wire changing between a convex shape and a concave shape to change the position of the second cylinder.

10. (Previously presented) The battery of claim 9 further comprising a member coupled between an upper end portion of the second member and the wire to transfer a force generated by the wire to the second member.

11. (Previously presented) The battery of claim 6 wherein the actuator is a ribbon with the ribbon changing between a convex shape and a concave shape to change the position of the second cylinder.

12. (Previously presented) The battery of claim 11 further comprising a member coupled between an upper end portion of the second member and the ribbon to transfer a force generated by the ribbon to the second member.

13. (Previously presented) The battery of claim 6 wherein the actuator is a ribbon, wherein the first and second members are coaxially disposed cylinders each having a plurality of openings arranged in a column along the length of the cylinders.

14. (Previously presented) The battery of claim 1 wherein the first member is a cylinder and the second member is a ribbon of a shape memory alloy material, the ribbon disposed over the at least one hole in the first cylinder.

15. (Previously presented) The battery of claim 6 wherein the first and second members are coaxially disposed cylinders each having a plurality of openings arranged in a column along the length of the cylinders.

Claims 16-50 are canceled.

51. (Previously presented) A method of operating a battery, the method comprises:

controlling a quantity of air that enters a metal-air battery by:

passing current through a member coupled to a first cylindrical member and a second cylindrical member, to move one of the first cylindrical member and the second cylindrical member from a first position to a second position, the first cylindrical member having at least one hole that is exposed to air, with the second position providing the at least one hole in the first cylindrical member in registration with at least a second hole in the second cylindrical member and when current is not drawn from the battery the member causing the one of the first cylindrical member and the second cylindrical member to return to the first position such that the holes are not in registration inhibiting air to pass into the battery.

52. (Previously presented) The method of claim 51 wherein the hole in the first and second cylindrical members is a first hole and each of the first and second cylindrical members have a plurality of holes including the first hole.

53. (Previously presented) The method of claim 52 wherein the first and second cylindrical members are coaxially disposed and the holes in each of the cylindrical members are arranged in a column along the length of the cylindrical members.

54. (Previously presented) The method of claim 51 wherein moving comprises:

passing a current through a member comprised of a shape memory alloy material to change the shape of the member and effect movement of the first cylindrical member.

55. (Previously presented) The method of claim 54 wherein the member is an actuator comprised of a high force, low displacement shape memory alloy (SMA).

Claims 56-58 are canceled.

59. (Previously presented) A battery comprises:

a battery can housing a cell that supplies electrical energy at terminals of the cell by an electro-chemical reaction with oxygen, the can including:

a first cylindrical member having at least one hole;

a second cylindrical member having at least one hole; and

a member coupled to one of the first and second cylindrical members to move one of the first and second cylindrical members such that when current is drawn from the battery, the holes in the first and second cylindrical members are in registration to allow air to pass into the battery and to move the one of the first and second cylindrical members such that when current is not drawn from the battery, the holes in the first and second cylindrical members are not in registration to inhibit air to pass into the battery.

60. (Previously presented) The battery of claim 59 wherein the first and second cylindrical members are coaxially disposed each having at least one opening that are placed in and out of registration to allow or inhibit air from passing into the battery.

61. (Previously presented) The battery of claim 59 wherein the first and second cylindrical members are coaxially disposed each having a plurality of openings that are placed in and out of registration to allow or inhibit air from passing into the battery through the plurality of openings.

62. (Previously presented) The battery of claim 59 wherein the first and second cylindrical members are coaxially disposed and each has a plurality of openings arranged in a column along the length of the cylindrical members.

63. (Previously presented) The battery of claim 59 wherein the first and second cylindrical members are coaxially disposed and the member is coupled to the second cylindrical member that is coaxially disposed within the first cylindrical member.

64. (Previously presented) The battery of claim 59 wherein the member is an actuator comprised of a shape memory alloy material.

65. (Previously presented) The battery of claim 59 wherein the member is an actuator comprised of a high force, low displacement shape memory alloy (SMA).

66. (Previously presented) The battery of claim 65 wherein the actuator is coupled to a circuit that draws power during a change of state allowing the circuit to minimize drain on the battery.

67. (Previously presented) The battery of claim 64 wherein the actuator is a wire.

68. (Previously presented) The battery of claim 67 further comprising a member coupled between an upper end portion of the second member and the wire to transfer a force generated by the wire to the second member.

69. (Previously presented) The battery of claim 64 wherein the actuator is a ribbon.

70. (Previously presented) The battery of claim 69 further comprising a member coupled between an upper end portion of the second member and the wire to transfer a force generated by the wire to the second member.

Claims 71-82 are withdrawn.

83. (Currently amended) A method of operating a battery, the method comprises:

controlling a quantity of air that enters a metal-air battery by:

passing current through a member to move a first member mechanically coupled to the member ~~first member~~ relative to a second member having a least one hole that is exposed to air, such that when current is consumed from the battery, the hole in the second member is opened to permit air to flow through the hole into the battery and when current is not flowing through the member, the member causes the first member to move inhibiting air from flowing through the hole into the battery.

Claim 84 is canceled.

85. (Previously presented) The method of claim 83 wherein first and second members are cylindrical members.

86. (Previously presented) The method of claim 83 wherein first member is a ribbon and the second member is cylindrical member.

87. (Previously presented) The method of claim 83 wherein moving comprises:

passing a current through an actuator comprised of a shape memory alloy material to change the shape of the member and effect movement of the first member.

88. (Previously Presented) The method of claim 83 wherein the first member is the actuator and is comprised of a high force, low displacement shape memory alloy (SMA).

89. (Previously presented) The method of claim 83 wherein the actuator is attached to the first member is and is comprised of a high force, low displacement shape memory alloy (SMA).